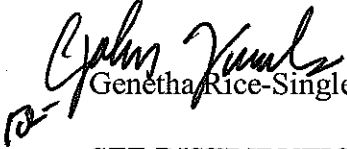


**DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

INTERDEPARTMENT CORRESPONDENCE

FILE P. I. No. 0008651, Chatham County **OFFICE** Preconstruction
CSSTP-0008-00(651)
SR 204 Spur/Diamond Causeway at Skidaway Narrows
Bridge Replacement **DATE** July 25, 2008

FROM  Genetha Rice-Singleton, Assistant Director of Preconstruction

TO SEE DISTRIBUTION

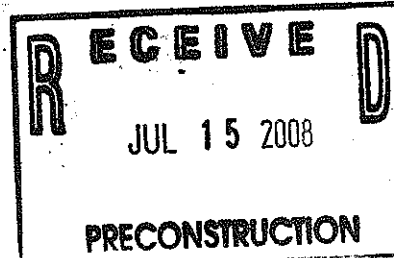
SUBJECT APPROVED REVISED PROJECT CONCEPT REPORT

Attached for your files is the approval for subject project.

Attachment

DISTRIBUTION:

Brian Summers
Glenn Bowman
Ken Thompson
Michael Henry
Keith Golden
Paul Liles
Glenn Durrence
Brad Saxon
Ben Buchan
BOARD MEMBER




DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE CSSTP-0008-00(651), Chatham County
SR 204 Spur/Diamond Causeway at Skidaway Narrows
P.I. No. 0008651

OFFICE Urban Design
DATE July 10, 2008

FROM 
James B. Buchan, P.E., State Urban Design Engineer

TO Genetha Rice-Singleton, Assistant Director of Preconstruction

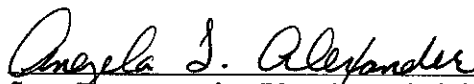
SUBJECT Revised Project Concept Report

Attached is the original copy of the Revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The complete removal of the bridge will be required to be completed under this contract. The substructure is to be removed to 2'-0" below the existing ground, existing channel or U.S. Corps of Engineers' dredging template in accordance with the U.S. Corps of Engineers' Section 10 permit.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the Regional Transportation Program (RTP) and/or the State Transportation Improvement Program (STIP).

DATE 7-11-08


State Transportation Planning Administrator

DVM

Distribution: Brian Summers, P.E., Project Review Engineer, w/Attachment
Glenn Bowman, P.E., State Environmental/Location Engineer, w/Attachment
Keith Golden, P.E., State Traffic Safety and Design Engineer, w/Attachment
Angela Alexander, State Transportation Planning Administrator, w/Attachment
Jamie Simpson, Financial Management Administrator, w/Attachment
Glenn Durrence, P.E., District 5 Engineer, w/Attachment
Paul Liles, P.E., State Bridge and Structural Design Engineer, w/Attachment

REVISED PROJECT CONCEPT REPORT

Need and Purpose:

Project Number CSSTP-0008-00(651) will replace the structurally deficient, existing bascule bridge (Structure ID 051-0147-0) over Skidaway Narrows located on State Route 204 SPUR/Diamond Causeway.

The Skidaway Narrows bridge sufficiency rating is 45. The Office of Bridge Maintenance has determined that any bridge with a sufficiency rating less than 50 should be replaced rather than improved. This project will replace the existing bridge with a structurally adequate bridge.

State Route 204 SPUR is functionally classified as an Urban Minor Arterial. The posted speed limit along State Route 204 SPUR is 50 mph at Skidaway Narrows Bridge. The Skidaway Narrows Bridge is located 6 miles southeast of SR 204 and was constructed in 1970. State Route 204 SPUR corridor is identified in the Chatham – Savannah Bikeway Path program. Sidewalks are not proposed for this bridge, bike lanes, however, will be incorporated on the 8 foot shoulders. The Base Year Traffic (2010) along this section of roadway is 18,200 VPD. The projected future Design Year Traffic (2030) for this section of roadway is 30,900 VPD.

The bridge's vulnerability is a concern to the public as well as state and local agencies. In case of an emergency, many parts for the bascule bridge are not readily available and would have to be ordered or cast. Maritime accidents involving bridge collisions with tugs/barges could potentially cause an interruption in bridge operations. The bridge is also at risk from damage as a result of traffic accidents, which could potentially interrupt bridge service at critical times. Interruption of bridge operations would be troublesome at any time. Since the Skidaway Narrows Bridges is the single vehicular connection for Skidaway Island to the mainland, concern about an interruption in bridge operations is rooted in the potential risks faced by Island residents if the connection is severed in advance of a hurricane evacuation when mainland connectivity is crucial.

The need exists to replace the structurally deficient, existing bascule bridge (Structure ID #021-0147-0) over Skidaway Narrows located on State Route 204 SPUR. This will bring it up to current design standards and in doing so will improve the operations and safety of this roadway.

Project location:

Project Number CSSTP-0008-00(651) is located over Skidaway Narrows located on State Route 204 SPUR/Diamond Causeway. The project begins at ML 5.50 and extends eastward approximately 1.25 miles to ML 6.75. The entire project is in Chatham County.

Description of the approved concept:

PDP Classification: Major X Minor

Federal Oversight: Full Oversight (), Exempt (X), State Funded(), or Other ()

Functional Classification: Urban Minor Arterial

U. S. Route Number(s): N/A **State Route Number(s):** SR 204 SPUR

Traffic (AADT) as shown in the approved concept:

Current Year: 18,200 (2010)

Design Year: 30,900 (2030)

Proposed features to be revised:

In the approved Concept Report, the description of the project stated the bascule bridge will be removed on STP-00MS(4) or under a separate contract. The complete removal of the bridge will be required to be completed under this contract. The substructure is to be removed to 2'-0" below the existing ground, existing channel or U.S. Corps of Engineers' dredging template in accordance with the U.S. Corps of Engineers' Section 10 permit.

Describe the revised feature(s) to be approved:

The complete removal of the existing bascule bridge (Structure ID #021-0147-0) is to be completed as part of this project.

Updated traffic data (AADT):

Current Year: 18,200 (2010)

Design Year: 30,900 (2030)

Programmed/Schedule:

P.E. N/A

R/W: N/A

Construction: 2009

VE Study Required Yes(☒) No(☐)

Revised cost estimates:

1. Construction cost including ~~inflation and~~ E&C, \$ 31,137,000
2. Right-of-Way, and - 0 -
3. Utilities - \$ 1,500,000

Is the project located in a Non-attainment area? Yes(☐) No(☒)

Recommendation: I recommend this revised project concept be approved.

Attachment: Cost Estimate,

Concur: W.H. Long

Director of Preconstruction

Approve: Dale M.R.

Chief Engineer

Estimate Report for file "0008651_080212200862344"

Section BRIDGE - SKIDAWAY NARROWS 3220 FT by 44 FT 2 LN					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
500-XXXX	24312	SF	140.00	INTERMEDIATE SPANS 580 FT BY 41.917 FT	3403680.00
500-XXXX	25150	SF	180.00	MAIN SPANS 600 FT BY 41.917 FT	4527000.00
500-XXXX	1	Lump Sum	1300000.00	FENDER SYSTEM	1300000.00
500-XXXX	85510	SF	95.00	APPROACH SPANS 2040 FT BY 41.917 FT	8123450.00
540-1102	1	LS	3000000.00	REMOVAL OF EXISTING BR, BR NO -	3000000.00
Section Sub Total:					\$20,354,130.00

Section Roadway Items					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
150-1000	1	LS	300000.00	TRAFFIC CONTROL -	300000.00
150-5000	4	EA	550.00	TRAFFIC CONTROL, TEMPORARY SAND LOADED ATTENUATOR MODULE	2200.00
150-5010	2	EA	12000.00	TRAFFIC CONTROL, PORTABLE IMPACT ATTENUATOR	24000.00
153-1300	1	EA	81714.00	FIELD ENGINEERS OFFICE TP 3	81714.00
158-1000	80	HR	0.80	TRAINING HOURS	64.00
201-1500	1	LS	100000.00	CLEARING & GRUBBING -	100000.00
205-0001	5000	CY	6.00	UNCLASS EXCAV	30000.00
206-0002	31000	CY	7.00	BORROW EXCAV, INCL MATL	217000.00
207-0203	1500	CY	60.00	FOUND BKILL MATL, TP II	90000.00
310-1101	13250	TN	20.00	GR AGGR BASE CRS, INCL MATL	265000.00
402-1812	500	TN	80.00	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	40000.00
402-3121	6559	TN	80.00	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	524720.00
402-3130	1640	TN	80.00	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	131200.00
402-3190	2186	TN	80.00	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	174880.00
413-1000	2981	GL	2.30	BITUM TACK COAT	6856.30
432-5010	1000	SY	5.00	MILL ASPH CONC PVM, VARIABLE DEPTH	5000.00
446-1001	200	LF	4.00	PVMT REINF FABRIC STRIPS, TP 1, INCL BITUM BINDER	800.00
456-2015	1	GLM	830.00	INDENTATION RUMBLE STRIPS - GROUND-IN-PLACE (SKIP)	830.00
550-1180	100	LF	46.00	STORM DRAIN PIPE, 18 IN, H 1-10	4600.00
550-1360	50	LF	90.00	STORM DRAIN PIPE, 36 IN, H 1-10	4500.00
550-2180	100	LF	42.00	SIDE DRAIN PIPE, 18 IN, H 1-10	4200.00
550-3318	2	EA	750.00	SAFETY END SECTION 18 IN, STORM DRAIN, 4:1 SLOPE	1500.00
550-4218	2	EA	680.00	FLARED END SECTION 18 IN, STORM DRAIN	1360.00
550-4236	2	EA	1300.00	FLARED END SECTION 36 IN, STORM DRAIN	2600.00
641-1100	160	LF	44.00	GUARDRAIL, TP T	7040.00
641-1200	4000	LF	20.00	GUARDRAIL, TP W	80000.00
641-5001	2	EA	700.00	GUARDRAIL ANCHORAGE, TP 1	1400.00
641-5012	2	EA	1810.00	GUARDRAIL ANCHORAGE, TP 12	3620.00
Section Sub Total:					\$2,105,084.30

Section Erosion Control - Permanent					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
603-1024	750	SY	85.00	STN PLAIN RIP RAP, 24 IN	63750.00
603-7000	1500	SY	5.00	PLASTIC FILTER FABRIC	7500.00
700-6910	3	AC	1000.00	PERMANENT GRASSING	3000.00
700-7000	5	TN	80.00	AGRICULTURAL LIME	400.00
700-7010	21	GL	20.00	LIQUID LIME	420.00
700-8000	4	TN	400.00	FERTILIZER MIXED GRADE	1600.00
700-8100	400	LB	3.00	FERTILIZER NITROGEN CONTENT	1200.00
710-9000	1000	SY	5.00	PERMANENT SOIL REINFORCING MAT	5000.00
716-2000	4000	SY	1.40	EROSION CONTROL MATS, SLOPES	5600.00
Section Sub Total:					\$88,470.00

Section Erosion Control - Temporary					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
163-0232	2	AC	700.00	TEMPORARY GRASSING	1400.00
163-0240	95	TN	300.00	MULCH	28500.00
163-0300	2	EA	1600.00	CONSTRUCTION EXIT	3200.00
163-0520	350	LF	17.00	CONSTRUCT AND REMOVE TEMPORARY PIPE SLOPE DRAIN	5950.00
163-0530	500	LF	5.00	CONSTRUCT AND REMOVE BALED STRAW EROSION CHECK	2500.00
165-0010	4000	LF	1.00	MAINTENANCE OF TEMPORARY SILT FENCE, TP A	4000.00
165-0030	1250	LF	2.00	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	2500.00
165-0070	300	LF	2.10	MAINTENANCE OF BALED STRAW EROSION CHECK	630.00
165-0101	2	EA	650.00	MAINTENANCE OF CONSTRUCTION EXIT	1300.00
165-0105	48	EA	120.00	MAINTENANCE OF INLET SEDIMENT TRAP	5760.00
167-1000	2	EA	1500.00	WATER QUALITY MONITORING AND SAMPLING	3000.00
167-1500	48	MO	1000.00	WATER QUALITY INSPECTIONS	48000.00
171-0010	8000	LF	2.50	TEMPORARY SILT FENCE, TYPE A	20000.00
171-0030	2500	LF	4.20	TEMPORARY SILT FENCE, TYPE C	10500.00
643-8200	4500	LF	3.02	BARRIER FENCE (ORANGE), 4 FT	13590.00
Section Sub Total:					\$150,830.00

Section Design Complete - 10%					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
XXX-XXXX	1	Lump Sum	3703500.00	Design Complete - 2-D Hydraulic Study, WFI, BFI, Soil Survey, etc.	3703500.00
Section Sub Total:					\$3,703,500.00

Section Signing and Marking					
Item Number	Quantity	Units	Unit Price	Item Description	Cost
632-0003	2	EA	17000.00	CHANGEABLE MESSAGE SIGN, PORTABLE, TYPE 3	34000.00
636-1020	300	SF	16.00	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING, TP 3	4800.00
636-1031	300	SF	24.00	HIGHWAY SIGNS, TP 1 MATL, REFL SHEETING TP 6	7200.00
636-2080	350	LF	12.00	GALV STEEL POSTS, TP 8	4200.00
636-2090	350	LF	10.00	GALV STEEL POSTS, TP 9	3500.00
652-0094	8	EA	50.00	PAVEMENT MARKING, SYMBOL, TP 4	400.00
653-0110	4	EA	80.00	THERMOPLASTIC PVMT MARKING, ARROW, TP 1	320.00
653-0120	10	EA	80.00	THERMOPLASTIC PVMT MARKING, ARROW, TP 2	800.00
653-0150	4	EA	80.00	THERMOPLASTIC PVMT MARKING, ARROW, TP 5	320.00
653-0160	4	EA	80.00	THERMOPLASTIC PVMT MARKING, ARROW, TP 6	320.00
653-0170	4	EA	80.00	THERMOPLASTIC PVMT MARKING, ARROW, TP 7	320.00
653-0210	12	EA	115.00	THERMOPLASTIC PVMT MARKING, WORD, TP 1	1380.00
653-0220	6	EA	115.00	THERMOPLASTIC PVMT MARKING, WORD, TP 2	690.00
653-0230	6	EA	115.00	THERMOPLASTIC PVMT MARKING, WORD, TP 3A	690.00
653-0296	6	EA	220.00	THERMOPLASTIC PVMT MARKING, WORD, TP 15	1320.00
653-1501	10000	LF	0.60	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, WHITE	6000.00
653-1502	10000	LF	0.60	THERMOPLASTIC SOLID TRAF STRIPE, 5 IN, YELLOW	6000.00
653-1704	120	LF	4.00	THERMOPLASTIC SOLID TRAF STRIPE, 24 IN, WHITE	480.00
653-3501	600	GLF	0.50	THERMOPLASTIC SKIP TRAF STRIPE, 5 IN, WHITE	300.00

654-1003	300	EA	5.00	RAISED PVMT MARKERS TP 3	1500.00
Section Sub Total:					\$74,540.00

Subtotal Construction Cost	\$26,476,554.30
E&C Rate 10.0 %	\$2,647,655.43
Inflation Rate 0.0 % @ 0 Years	\$0.00
Total Construction Cost	\$29,124,209.73
Right Of Way	\$0.00
ReImb. Utilities	\$1,500,000.00
Grand Total Project Cost	\$30,624,209.73

Total Estimated Cost: \$26,476,554.30

ENGINEERING @ 5% - 1,323,828
 CONTINGENCY @ 12% - 3,336,045

TOTAL CONST COST - 31,136,427 ←

RIGHT-OF-WAY - -0-
 REIMB UTILITIES - 1,500,000

TOTAL PROJECT COST - 32,636,427 ←

ADD
 7/18/2008

PI #	LET DATE	CONSTRUCTION COST	REIMBURSIBLE UTILITY COST	CONTINGENCIES			TOTAL PROJECT COST	STATUS	COMMENTS
				ENGR & INSPECTION 5%	CONSTRUCTION 12%	UTILITY 11%			
0008651	Jan-09	\$26,476,554.30	\$1,500,000.00	\$1,323,827.72	\$3,177,186.52	\$165,000.00	\$32,642,568.53	PRECST	Removal of existing bridge added to revised concept